What is Claimed:

1. In a wireless communication system, the communication system providing communication services to a plurality of mobile stations, a method for providing a plurality of transmit diversity protocols, the method comprising:

generating a first signal based on a first data stream having a first pilot and a second data stream having a second pilot, the first signal including the first and second pilots;

generating a second signal based on the first data stream having the first pilot and the second data stream having the second pilot such that the second signal is diverse relative to the first signal, the second signal including the first and second pilots;

phase-shift modulating the first signal to produce a phase-shift modulated signal;

transmitting the phase-shift modulated signal via a first antenna; and

transmitting the second signal via a second antenna,

wherein the first pilot is based on a first orthogonal code and the second pilot is based on a second orthogonal code.

2. The method of claim 1, wherein the step of generating the first signal based on the first data stream having the first pilot and the second data stream having the second pilot comprises combining the first data stream and the second data stream such that the first signal includes the first pilot and the second pilot, and wherein each of the first and second pilots is based on a Walsh code.

3. The method of claim 1, wherein the step of generating the first signal based on the first data stream having the first pilot and the second data stream having the second pilot comprises generating the first signal based on a first data stream having a

first pilot based on a Walsh code W0 and a second data stream having a second pilot based on a Walsh code W16.

4. The method of claim 1, wherein the step of phase-shift modulating the first signal to produce a phase-shift modulated signal comprises combining the first signal with a phase-shift parameter, and wherein the phase-shift parameter comprises a phase sweep of 360° for a bit interleaving period.

5. The method of claim 1, wherein the step of phase-shift modulating the first signal to produce a phase-shift modulated signal comprises combining the first signal with a phase-shift parameter, and wherein the phase-shift parameter comprises a phase sweep operable at an integer multiple of 360° for a bit interleaving period of 20 milliseconds.

6. The method of claim 1, wherein the step of generating the second signal based on the first data stream having the first pilot and the second data stream having the second pilot comprises combining the first and second data streams such that the second signal includes the first pilot and the second pilot, and wherein each of the first and second pilots is based on a Walsh code.

7. The method of claim 1, wherein the step of generating the second signal based on the first data stream having the first pilot and the second data stream having the second pilot comprises generating a second signal based on a first data stream having a first pilot based on a Walsh code W0 and a second data stream having a second pilot

based on a Walsh code W16 such that the second signal is diverse relative to the first signal.

8. The method of claim 1, wherein the phase-shift modulated signal comprises a first phase-shift modulated signal, and further comprising the steps of phase-shift the second signal to produce a second phase-shift modulated signal.

9. The method of claim 8, wherein the step of transmitting a second signal via a second antenna comprises transmitting a second phase-shift modulated signal via a second antenna.

10. The method of claim 1, wherein the communication system operates in accordance with one of a CDMA 2000-1X communication protocol and an IS-95 communication protocol.

11. The method of claim 1, wherein the plurality of transmit diversity protocols comprises one of an orthogonal transmit diversity (OTD) protocol, a space time spreading transmit diversity (STS-TD) protocol, and a phase-shift transmit diversity (PSTD) protocol.

12. In a wireless communication system, the communication system providing communication services to a plurality of mobile stations, a base station for providing a plurality of transmit diversity protocol, the base station comprising:

a first data stream source adapted to provide a first data stream having a first pilot, the first pilot is based on a first orthogonal code;

a second data stream source adapted to provide a second data stream having a second pilot, the second pilot is based on a second orthogonal code;

a first signal generator adapted to generate a first signal based on the first data stream and the second data stream, the first signal including the first and second pilots;

a second signal generator adapted to generate a second signal based on the first data stream and the second data stream such that the second signal is diverse relative to the first signal, the second signal including the first and second pilots;

a phase-shift modulator coupled to the first signal generator, the phase-shift modulator being operable to modulate the first signal to produce a phase-shift modulated signal;

a first antenna coupled to the phase-shift modulator, the first antenna being operable to transmit the phase-shift modulated signal; and

a second antenna coupled to the second signal generator, the second antenna being operable to transmit the second signal.

13. The base station of claim 12, wherein each of the first and second orthogonal codes comprises a Walsh code.

14. The base station of claim 12, wherein the first orthogonal code comprises a Walsh code W0.

15. The base station of claim 12, wherein the second orthogonal code comprises a Walsh code W16.

16. The base station of claim 12, wherein the first signal generator comprises a first signal combination circuit, wherein the first signal combination circuit is operable to combine the first data stream and the second data stream to produce the first signal.

17. The base station of claim 12, wherein the second signal generator comprises a second signal combination circuit, wherein the second signal combination circuit is operable to combine the first data stream and the second data stream to produce the second signal, and wherein the second signal is diverse relative to the first signal.

18. The base station of claim 12, wherein the phase-shift modulator comprises a phase-shift modulator operable to combine the first signal with a phase-shift parameter, and wherein the phase-shift parameter comprises one of a phase sweep of 360° for a bit interleaving period and a phase sweep operable at an integer multiple of 360° for a bit interleaving period of 20 milliseconds.

19. The base station of claim 12, wherein the phase-shift modulator comprises a first phase-shift modulator operable to modulate the first signal to produce a first phase-shift modulated signal, and further comprising a second phase-shift modulator operatively coupled to the second signal generator, wherein the second phase-shift modulator is operable to modulate the second signal to produce a second phase-shift modulated signal.

20. The base station of claim 19, wherein the second antenna comprises an antenna operatively coupled to the second phase-shift modulator, and wherein the antenna is operable to transmit the second phase-shift modulated signal.

21. The base station of claim 12, wherein the base station operates in accordance with one of a CDMA 2000-1X communication protocol and an IS-95 communication protocol.

22. The base station of claim 12, wherein the plurality of transmit diversity protocols comprises one of an orthogonal transmit diversity (OTD) protocol, a space time spreading transmit diversity (STS-TD) protocol, and a phase-shift transmit diversity (PSTD) protocol.

23. In a wireless communication system, the communication system for providing communication service for a plurality of mobile stations, wherein a processor operates in accordance with a computer program embodied on a computer-readable medium for providing a plurality of transmit diversity protocols, the computer program comprising:

a first routine that directs the processor to generate a first signal based on a first data stream having a first pilot and a second data stream having a second pilot, the first signal including the first and second pilots;

a second routine that directs the processor to generate a second signal based on the first data stream having the first pilot and the second data stream having the second pilot such that the second signal is diverse relative to the first signal, the second signal including the first and second pilots;

a third routine that directs the processor to phase-shift modulate the first signal to produce a phase-shift modulated signal;

a fourth routine that directs the processor to transmit the phase-shift modulated signal via a first antenna; and

a fifth routine that directs the processor to transmit the second signal via a second antenna,

wherein the first pilot is based on a first orthogonal code and the second pilot is based on a second orthogonal code.

24. The computer program of claim 23, wherein the first routine comprises a routine that directs the processor to combine the first data stream and the second data stream such that the first signal includes the first pilot and the second pilot, and wherein each of the first and second pilots is based on a Walsh code.

25. The computer program of claim 23, wherein the first routine comprises a routine that directs the processor to generate the first signal based on a first data stream having a first pilot based on a Walsh code W0 and a second data stream having a second pilot based on a Walsh code W16.

26. The computer program of claim 23, wherein the second routine comprises a routine that directs the processor to combine the first and second data streams such that the second signal includes the first pilot and the second pilot, and wherein each of the first and second pilots is based on a Walsh code.

27. The computer program of claim 23, wherein the second routine comprises a routine that directs the processor to generate a second signal based on a first data stream having a first pilot based on a Walsh code W0 and a second data stream having a second pilot based on a Walsh code W16 such that the second signal is diverse relative to the first signal.

28. The computer program of claim 23, wherein the third routine comprises a routine that directs the processor to combine the first signal with a phase-shift parameter, and wherein the phase-shift parameter comprises a phase sweep of 360° for a bit interleaving period.

29. The computer program of claim 23, wherein the third routine comprises a routine that directs the processor to combine the first signal with a phase-shift parameter, and wherein the phase-shift parameter comprises a phase sweep operable at an integer multiple of 360° for a bit interleaving period of 20 milliseconds.

30. The computer program of claim 23, wherein the phase-shift modulated signal comprises a first phase-shift modulated signal, and further comprising a routine that directs the processor to phase-shift modulate the second signal to produce a second phase-shift modulated signal.

31. The computer program of claim 30, wherein the fifth routine comprises a routine that directs the processor to transmit the second phase-shift modulated signal via the second antenna.

32. The computer program of claim 23, wherein the computer program operates in accordance with one of a CDMA 2000-1X communication protocol and an IS-95 communication protocol.

33. The computer program of claim 23, wherein the plurality of transmit diversity protocols comprises one of an orthogonal transmit diversity (OTD) protocol, a space time spreading transmit diversity (STS-TD) protocol, and a phase-shift transmit diversity (PSTD) protocol.

34. The computer program of claim 23, wherein the medium is one of paper, a programmable gate array, application specific integrated circuit, erasable programmable read only memory, read only memory, random access memory, magnetic media, and optical media.